Claims

1. An apparatus for ablating tissue, the apparatus comprising:

first and second opposing jaws operative to secure tissue to be ablated therebetween;

the first jaw having a first ablation surface directing ablative energy into the tissue; and

the second jaw having a second ablation surface reflecting ablative energy into the tissue.

2. The apparatus according to claim 1, further comprising a passage for communication of a cooling fluid to at least one of the first and second elongated jaws.

3. The apparatus according to claim 1, further comprising a heat exchanger for the conduction of heat away from a distal end of the apparatus.

4. The apparatus according to claim 1, wherein the first jaw comprises an ultrasonic transducer for supplying ultrasonic ablative energy to the first ablation surface.

5. The apparatus according to claim 1, wherein the ablative energy directed into the tissue by the first ablative surface is focused at its source.

6. The apparatus according to claim 1, wherein the second ablation surface is shaped to focus the reflected ablative energy.

7. The apparatus according to claim 1, further comprising a temperature probe adjacent one of the first and second ablation surfaces.

8. The apparatus according to claim 1, wherein the ablative energy is one of ultrasonic, microwave, laser, radio-frequency and cryoablative energy.

9. The instrument of claim 1, wherein one of the first and second jaws has a pointed distal tip for piercing tissue.

10. The instrument of claim 9, wherein the pointed distal tip comprises a tapered surface terminating in a sharp leading edge.

11. The instrument of claim 1, wherein the first and second jaws maintain at least a substantially parallel relationship between the open and closed positions.

12. The instrument of claim 11, further comprising:

biasing means for biasing the first and second jaws in the open position;

a first elongated rod disposed at a proximal end of the first jaw;

a second elongated rod disposed at a proximal end of the second jaw;

an elongated tube having a lumen for disposing the first and second elongated rods;

wherein at least one of the first and second elongated rods and the elongated tube is operatively connected to the articulation means such that actuation thereof forces the first and second jaws into the closed position against a biasing force of the biasing means.

13. The instrument of claim 12, wherein the articulation means comprises a handle, the elongated tube and first and second elongated rods having a proximal end operatively connected to the handle, the handle having a fixed portion and a movable lever portion, wherein rotation of the movable lever portion relative to the fixed portion actuates the first and second jaws into the closed position and an opposite rotation of the movable lever portion relative to the fixed portion actuates the first and second jaws into the open position.

14. The instrument according to claim 1, wherein the first and second jaws are operative to compress tissue therebetween.